

Convergence of Indigenous Knowledge Systems and Contemporary Approaches in Cultural Heritage Management

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Abstract

Amidst the unprecedented growth of the global experiential economy in the tourism industry, the conservation of cultural heritage has become an issue of wide interest and concern. As a result, many empirically-based models have been developed for conserving cultural heritage, but as evidence of sustainability challenges in heritage tourism indicates, whatever models have been developed haven't achieved much. Seemingly there are more myths than realities informing the models adopted to deal with heritage conservation in Zimbabwe. Evidence from extant literature reveals that most of these approaches seemed fragmented and did not consider the needs and values of previous custodians of these heritage resources. Sustainable cultural heritage, however, calls for the active engagement of multiple stakeholders across cultural heritage tourism attractions. The marginalization of both traditional and or indigenous perspectives in cultural heritage management has rendered efforts in conserving these resources piecemeal and inadequate. Therefore, this study problematizes the utility value of myths and models uncritically 'borrowed' from past experiences as well as 'copied and pasted' from the West for managing heritage conservation. The study findings revealed that the adoption of modern approaches to cultural heritage management resulted in either total or semi-total marginalization of traditional institutions of resource management fomenting conflict, confusion, and semi-anarchy. Further, the findings of the study demonstrated that both conservation of indigenous knowledge systems and contemporary approaches to cultural heritage management focus on creating sustainable ecosystems, preservation, and conservation of cultural approaches and have both employed hegemonic approaches to conservation and preservation. The study, therefore proposed an integrative framework to forge a partnership between traditional institutions and modern institutions of governance.

Keywords: Cultural heritage, Indigenous Knowledge system, Cultural heritage Management, Integrative Framework

1. Introduction

The exploitation of cultural heritage in its various forms for tourism development has been seen as offering a niche market with unlimited potential and often an inexpensive approach to appeal to a different tourism market segment. Such a phenomenal growth in demand has led to a paradigm shift in focus from mere consumption of

cultural heritage tourism products towards a higher inclination for sustainable cultural heritage tourism. Years ago, intergenerational custodians of cultural heritage proposed and utilized various approaches to safeguard their cultural heritage. However, evidence from extant literature reveals that most of these approaches seemed fragmented and with no consideration for the needs and values of previous custodians of these heritage resources. To that effect, there have existed unresolved conflicts between traditional and contemporary cultural heritage management practices. Sustainable cultural heritage, however, calls for the active engagement of multiple stakeholders across cultural heritage tourism attractions. The marginalization of both traditional and/or indigenous perspectives in cultural heritage management has rendered efforts to conserve these resources piecemeal and inadequate. Therefore, the focus of this chapter is to interrogate the convergence of Indigenous Knowledge Systems and contemporary approaches in Sustainable cultural heritage management.

2. Literature Review

Natural Resource Management (NRM) in Zimbabwe can be classified into four regimes, each with its distinct management style, which translates into a measure of its effectiveness in the management of natural resources. These four basic regimes include the pre-colonial, the colonial, the post-colonial, and the new thrust of community-based management systems based on the Kyoto Protocol. The history of natural resources in Zimbabwe can be traced as far back as the precolonial era. The chiefs and traditional beliefs formed the institutions that were responsible for the management of natural resources (Chigwenya & Manatsa, 2007; Harrison, 2015). In so far as natural resources management was concerned, some traditional systems and practices helped to preserve natural resources. The management regime was characterized by their deep commitment to societal interest, which amounts to a deep reverence for societal good (Dore 2001, Chigwenya & Manatsa, 2007).

Across Africa, religious beliefs, traditional beliefs, cultural mores, and practices play a crucial role in the successful conservation of the environment and specific organisms (Sasaki et al., 2010; Ngara & Mangizvo, 2013). In Zimbabwe, the use of taboos, totems, and sacred places have been used to protect and preserve the environment as part of Indigenous knowledge (Risiro et al, 2013). Even to this day, cultural taboos and their sanctions have helped to check abuse of the environment at least among the local people. Religious beliefs, cultural mores, and practices are often aligned with today's conservation ethics (Barrow & Pathak, 2005; Tengo et al., 2007; Jones et al., 2008; Dudley et al., 2009). It is therefore conceivable that these traditions should be included in conservation and management strategies as they have tacitly proved effective. In revered areas, local people refrain from cutting down trees, killing animals, and harvesting useful plants within such sites believing

that the deities would be offended if disturbed and met punishment upon such offenders. Certain sacred hills and pools were places of abode for Gods and Spirits, hence taboo.

In Ghana, ancestral veneration plays a critical role in the conservation of resources. Traditional Ghanaians believe that ancestors can punish a person who violates traditionally sanctioned mores or destroys the environment. Burial and ritual sites are believed to be the abode of ancestors and are kept as sacred groves. Resource exploitation through activities such as farming, hunting, and tree cutting are prohibited in these places until certain rituals are performed. The sacred groves harbor economically and socially important ecological species (Opoku, 2006). In Nigeria and especially among the Igbo community, cultural values were safeguarded through the use of traditional taboos (laws) and sanctions. These practices were used to preserve “sacred groves” for the ultimate aim of better management and conservation of natural resources (Anoliefo et al., 2003).

In Zimbabwe, the Shona environmental taboos foster a sustainable use of the environment. Among the Shona people, an unconscious appreciation of certain „environmental taboos“ informs an esoteric environmentally based knowledge that is meant for sustainable use of nature“ 's resources (Chemhuru & Masaka, 2010). Even though the Shona people have been exposed to cultural globalization, they continue to be guided by their values, taboos, and beliefs in the conservation and management of their natural resources. Shona taboos are specifically fundamental in preserving the environment and protecting water sources, natural vegetation and wildlife, and endangered nonhuman species (Chemhuru & Masaka, 2010). As such they are a source of environmental ethics, propagating a synergistic relationship between human beings and biodiversity.

These beliefs and taboos formed codes of behavior that ensured sustainable natural resource utilization (Harrison, 2015; Muboko & Murindagomo, 2014). In this setup, the ancestors and founding spirits were (and in areas where religious beliefs and cultural practices are still valued are) the custodians of natural resources and wildlife and their utilization was supposed to be done in accordance with the agreed codes of behavior that vary from society to society. For instance, the Shona tribes regard certain plant species such as the *Burkea Africana* and *seclerorya* as sacred. As a result, such specified species could not be tampered with in any way such as burning or cutting. Societies, social conformity, and religious sanctions fostered compliance with natural resource management regimes. Any violation of these codes of behavior was said to induce some disasters such as droughts, famines, or diseases (Resource Africa, 2002; Gunther 1999; Fonjong, 2008; Anthwala et al., 2010; Sasaki et al., 2010; Ngara & Mangizvo, 2013). So the cutting or destruction of such trees would detach people from their ancestors, thereby spelling doom to the tribe. Tsikai (2000) argues that although the Shona people believed in God, virtually

all of them still believed their ancestral spirits were their protectors. It is this belief that has perpetuated an intriguing culture supported by a set of procedures, protocols, and customs. The fear of angering the ancestors and their subsequent retribution acts as a prohibitive measure against behavior and attitude detrimental to sustainable resource use.

Destruction and intrusion of forests were believed to anger spirits, which would result in the inducement of conflict between people and wild animals and also result in the withdrawal of the bounty of land and its resources. These informal institutions for thousands of years had been intact and managed to regulate natural resource utilization not only in Zimbabwe but Africa as a whole (Gunther 1999; Sasaki et al., 2010; Ngara & Mangizvo, 2013). Even though the Shona people have been exposed to cultural globalization, they continue to be guided by their values, taboos, and beliefs in the conservation and management of their natural resources. Shona taboos are specifically fundamental in preserving the environment and protecting water sources, natural vegetation and wildlife, and endangered nonhuman species (Chemhuru & Masaka, 2010). As such they are a source of environmental ethics, propagating a synergistic relationship between human beings and biodiversity. Thus, people sustainably utilize their resources even though their whole livelihood depends on natural resources.

The way individuals and communities interact with the natural resources in their localities owes much to their culture. More often than not, intervention programs intended to engender sustainable utilization of natural resources, in particular areas, ignore the cultural milieu (context) governing resource use (Mamimine, 1999; Tanyanyiwa & Chikwanha, 2011). The formation of modern institutions namely Village Development Committees (VIDCOs), Ward Development Committees (WADCOs), and Community-Based Natural Resource Management (CBNRM) became a major source of conflict at the village level as they were interpreted by traditional leadership as grabbing their power. Thus, intervention programs have not only triggered conflict between ‘interventionists’ and the local people but also resulted in scarce resources being deployed to implement a program whose failure is guaranteed from the onset. A sustainable Natural Resource Management System (NRMS) requires the adoption of “constructive invention” (Burton, 1990:133) systems.

Despite being trivialized, sacredness has continued to play a crucial role in the conservation of natural resources. Things such as sacred grooves are seen as representing pre-colonial forest conservation. They formed the patchwork of forests that remained undisturbed by human activities. Sacred pools were also used to conserve wetlands. All these practices played a very important part in resource management. They formed an embodiment of ideas, concepts, and categorization that were able to be produced and reproduced into a set of practices that

formed the backbone of natural resource management and a body of law called customary law which had both procedural and substantive rights (Katerera, 2001). What remained important in the environmental management institutions of this time was that they better integrated traditional and social-cultural traits and hence were given moral and political legitimacy at the local level (Kayambazintu et.al. 2003). This enabled them not only to be stable but also to endure for such a long time.

Intervention programs are destructive, especially in situations where they render the local cultural cosmology governing natural resource use and management dysfunctional. The underlying belief of the protectionist regime was that to preserve the environment and its resources, it should be kept separate from human activity (Gandiwa et al., 2014b). This approach resulted in the creation of national parks and protected areas kept strictly separate from the local communities and other human activity (Gandiwa et al., 2014; Machena et al. 2017). The major drawback of most of the interventionist programs employed in response to natural resource management challenges rural Indigenous communities who had traditionally managed and lived with their surrounding ecosystems were, in most cases, restricted from accessing vital resources by the colonial powers. Especially in the case of wildlife, the resources were instead available for colonial trophy hunting on private reserves, and yet hunting for food was illegal on communal lands. Thus 'conservation' came to symbolize a 'white man's luxury' (Muboko & Murindagomo, 2014). This separation has contributed to the poverty and struggles for survival commonly associated with many of the rural natural-resource-dependent communities (Muboko & Murindagomo, 2014). In response, there is evidence of an increasing struggle between traditional leadership and imposed authorities in these interventionist programs around issues of authority, power, and resource access.

This paper therefore argues that to achieve some measure of success in Natural Resource Management, decision-makers should take into account cultural factors impinging or likely to impinge on any proposed Natural Resource Management programs. To gather evidence to support the paper's argument, the section below focuses on the adopted research methodology.

3. Methodology

This paper draws insights from existing literature to demonstrate the cultural dynamics of natural resource management in Zimbabwe. This study employed a general review of literature on the natural resource management and Shona cultural practices and religious observations. Qualitative content analysis is a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns (Hsieh & Shannon, 2005; Patton, 2002). This type of research design

is most appropriate when existing theory exposure is limited. Mayring (2015) argues that content analysis uncovers patterns, themes, and categories important to social reality. The method is ideal as it analyses social phenomena in a non-invasive way, in contrast to simulating social experiences or collecting survey answers.

Using a qualitative content analysis of several published empirical information on natural resource management, this paper sought to highlight the centrality of culture in natural resource management. Data for the study was construed from journal articles, books, papers, and other relevant sources on the research topic that were reviewed. A Google Scholar search was conducted for articles that center on the phenomenon under interrogation. To get relevant articles on the internet, the researcher used the following study focus related search terms: Shona religious beliefs, cultural beliefs, customs and practices, the role of religious beliefs and cultural practices in natural resource management, the role of religious beliefs and cultural practices in sustainable utilization of natural resources, Shona totems and taboos and their role in natural resource management. Both classical and contemporary literature were made use of. Generally, the study focused on material published between 1980-2020. Several journal articles were reviewed.

Also, the reference lists of studies that were identified by any of the aforementioned methods were searched for additional relevant studies. Studies that examined the role of Shona cultural practices and religious beliefs in natural resource management/natural resource conservation/sustainable utilization of natural resources were included. A total of 30 articles were utilized. This number is commensurate with content analysis (Nueundorf, 2016; Krippendorff, 2018). The researcher used themes as a unity of analysis. The results and discussion of the findings are presented below.

4. Results

Before engaging in a discussion on the cultural dynamics of Natural Resource Management, it seems necessary for one to take a position with regards to one's conceptualization of the phenomenon of 'culture'.

4.1 Understanding Culture

Culture may be perceived as a subset of the institutional cosmology governing natural resource use and management. Like formal rules and regulations, government departments, non-governmental organizations, and conventions governing natural resource use, local culture also provides an institutional framework regulating natural resource use. Newby (2016) defines culture as a total way of life. Shoko (2007) further points out that,

above all culture results in religious catalogs of fiats and bans that claim absolute obedience. In essence, nothing about the way of life of any community escapes culture. Everything in a community is an expression of that community's culture.

However, culture is not expressed by any fleeting or isolated experience. For anything to pass as a culture of a particular community it has to be an integral part of a *repertoire* (collection) of that community's shared values, often referred to as norms and values (Newby, 2016). Norms may be loosely defined as widely accepted and expected patterns of behavior or conduct in various situations in a community or society e.g. the norm of reciprocity. Values are standards, principles, or ideas about the worth of certain phenomena generally accepted by a particular community or society e.g. moral values and so on (Benyera, 2014). Both norms and values emerge out of a consensus view.

4.2 Culture and Natural Resource Management

The place of culture in Natural Resource Management may be conceptualized in two forms. Firstly, there are aspects of local culture that by their nature promote a sustainable Natural Resource Management system (Mamimine, 1999; De Georges & Reilly, 2009; Chigwenya & Manatsa, 2007; Tanyanyiwa & Chikwanha, 2011). Another form is where culture interferes with sound NRMS. Cases, where culture promotes NRM, can be illustrated by examples from the Shona people of Zimbabwe's totems, the role of traditional institutions of governance, traditional medicine, traditional burial system, and agri-forestry. On the other hand, cultural practices that inhibit effective NRM can also be illustrated by Shona societies with a hunting history, round huts, and ornamental dressing which leads to fauna and flora decimation.

4.3 Traditional Institutions of Governance in NRM

During the colonial era, traditional institutions of governance such as Chiefs, Headmen, and Kraal heads had the authority to deal with any cases of violation of rules and regulations on natural resources conservation (De Georges & Reilly, 2009; Chigwenya & Manatsa, 2007). Although their authority in natural resource management derived primarily from the colonial government conservation laws, the respect they commanded among their people in enforcing the laws was hinged on people's perception of their office. People regarded their office as an embodiment of divine authority delegated to them by their ancestral spirits of the land. To be in serious conflict with them and the values they represented was akin to starting a war against one's Creator. The obvious

consequence was death mysteriously. This myth embodied in the institution of the traditional leaders largely accounted for many people's conformity with the laws about the conservation of natural resources.

4.4 Totems in NRM

The indigenous people possessed a very vital knowledge base that was characterized by deep virtues of moral being, ethically based, spiritually intuitive, and above all holistic (Dore 2001; Chemhuru & Masaka, 2010). It was these virtues that formed the basis of natural resource management regimes in the precolonial period. They developed cultural beliefs and taboos that formed the foundation for natural resource management (Muboko & Murindagomo, 2014; Musakwa et al., 2020). Natural resource conservation strategies were interwound in these cultural beliefs and had been able to regulate their sustainable utilization. These beliefs and taboos formed codes of behavior that ensured sustainable natural resource utilization. In this setup, the ancestors and founding spirits were the custodians of natural resources and wildlife and their utilization was supposed to be done in accordance with the agreed codes of behavior that vary from society to society. Societies, social conformity, and religious sanctions fostered compliance with natural resource management regimes. Any violation of these codes of behavior was said to induce some disasters such as droughts, famines, or diseases (Resource Africa, 2002; Gunther 1999).

The sustainable natural resource use thinking is not exclusive to modern paradigms of NRM. Shona culture has always had it through its totem system. Under the totem system, most families or individuals are identified with a particular animal or fish. Some of the animals people identify with in their totemic system, *inter alia*, are lions, elephants, eland, sheep, monkeys, and others. Although meat formed the greater part of indigenous people's diet, the harvesting of wildlife did not degrade the environment (Murombedzi, 1990; Chemhuru & Masaka, 2010; Ngara & Mangizvo, 2013). Not all animals were hunted, some animals were considered to hold special societal values and hence were not hunted for example one was not allowed to hunt animals of his/her totem and there was a certain group of animals such as baboons and monkeys, which were not allowed to be hunted. Nobody ate the flesh of an animal he identifies with as a totem. The hunting did not adversely affect the population of big game even though wildlife products constituted important commodities (Murombedzi 2003). In essence, this setup ensures that there is a whole clan prohibited from eating the flesh of a particular animal. In a way, this ensured that most of the animals would not become extinct since not many people would be eating the flesh of a specific animal. Thus, from this perspective, one may conclude that the Shona taboos are specifically fundamental in preserving the environment and protecting water sources, natural vegetation and wildlife, and endangered

nonhuman species (also see Chemhuru & Masaka, 2010). As such they are a source of environmental ethics, propagating a synergistic relationship between human beings and biodiversity.

4.5 Traditional Medicine

In Zimbabwe, traditional medicine relies on plants. For a long, universal cultures have manipulated their knowledge of medieval herbs and their properties for use as the first line of defense against various human ailments. (Asase, Akwetey, & Achel, 2010; Au et al., 2008; Maroyi, 2011, 2013). Today, as much as 80 % of the world's population still depends on traditional medicine for their primary healthcare needs. (Chauhan et al., 2014; Folashade, Omoregie, & Ochogu, 2012; Hishe et al., 2016; Maroyi, 2013; Shetty, 2010). Maroyi (2013) asserts that Zimbabwe continues to experience an upsurge in demand for herbal medicines yet the traditional remedies remain untapped for their economic potential both at domestic and national level. Maroyi (2013) asserts that about 80 % of Zimbabweans still depend on herbal medicine. Herbal medicines are said to be affordable for economically poor countries like Zimbabwe. (Mafuva & Marima-Matarira, 2014).

As more people seek traditional medication, the pressure on trees and other small plants with medicinal properties increases (Abbot, 2014). In this situation, the threat of species extinction looms large. To ensure sustainability, Shona traditional healers are governed by certain codes of conduct. For instance, the norm rather than an exception is that where a healer requires the bark of a tree for medicine he has to remove part of the bark on the western side of the tree and remove the next piece of bark from the eastern side. In doing so, he has to ensure that part of the bark remains on both the northern and the southern side of the tree trunk. The myth is that if this procedure is not followed the medicine would not work. Nevertheless, the internal logic of the myth is species conservation. The medicinal plant would stand a chance of regenerating since barks are left from its sides. Thus, it is usually observed that among the rural communities of the world, the preservation of the environment has an inextricable link to the culture of the people (Anoliefo et al., 2003). Such an observation calls for a need to marry modern forms of natural resource conservation with traditional methods for an effective natural resource management framework. Such a call finds support in Sasaki et al. (2010) and Barrow and Pathak (2005) who posit that there is a growing consensus that traditional institutions provide considerable protection of ecosystems and biodiversity without governmental juridical restrictions.

Some plant species besides being sources of traditional herbal medicine are regarded as sacred. Specified trees such as *Burkea Africana* and *Sclerorya* could not be tampered with. The belief was that ancestral spirits use such tree species to reach people (Tanyanyiwa & Chikwanha, 2011). It is believed that the ancestral spirits of the

people live among the hills (Manwa, 2007). In most African communities, the ancestral spirits are believed to be living in the forests and special trees, caves, and ruined homes and water bodies (Wilson, 1989). Such landscape elements are therefore normally treated with veneration to ensure limited human access to them lest the spirits be offended and driven away „homeless“. In this regard, it is taboo to cut down trees found in a sacred place without the sanction of the local chief priest. The Amarula and Muhachi trees are of special mention here (Hyland & Ikumenne, 2005). Thus, such beliefs ensured the sustainable use of forests. This is further emphasized by Ngara and Mangizvo (2013) who opine that it is equally taboo to hunt or poach animals within or run into a sacred forest because they belong to Mwari and the ancestral spirits.

Some regulations regulate the harvesting of forests. Only dry wood was to be collected for firewood and some trees with social significance were preserved. Also, fruit trees and large trees were allowed to remain in fields to provide shade for fruits and fodder. Certain resources were restricted because of their scarcity and their particular value to the group (Katerera, 2001).

4.6 Caves as Burial Ground

In areas with hills and mountains, the practice among traditional Shona people was to bury people in caves. Mountains became burial places and as a result, they became so sacred that all natural resources found on them were not to be disturbed in any way (Fonjong, 2008; Opoku, 2006; Ngara & Mangizvo, 2013). One school of thought interprets this practice as having been popular because it was labor-saving. Nevertheless, others perceive it as a result of considerations of land use options. Rather than wasting fertile land by making it a burial ground, the Shona people of the time deemed it wise to adopt the cave burial system. In today's ever-shrinking productive land due to population pressure encouraging the culture of cave burials and cremation where possible would go a long way in preserving productive land.

4.7 Agri-forestry

Before the widespread use of axes, many Shona people used to practice agro-forestry. Crops and trees grew on the same patch of land with people still harvesting enough to feed their families. The advantage of this form of agricultural practice was that trees not only protect soil from erosion but also fertilize it with foliage. The colonial era saw many people using axes to clear trees to carry out farming on a particular piece of land. This practice increased deforestation and soil erosion in most parts of the country. Although the government encouraged people to erect contour ridges on land cleared for farming, this did not succeed in preventing soil erosion completely,

resulting in most arable land losing its fertility within a short space of time. In a study conducted by Mamimine (1999) in Nyamayaro village, elders regretted their abandonment of agroforestry in favor of modern practices of farming where they cleared almost all the trees in their area. Clearing of trees for farming has inflicted serious deforestation in their area. As a result, firewood and timber for building purposes are increasingly becoming scarce. Would it not be prudent for the government to reintroduce agro-forestry on an experimental basis in some parts of the land currently being designated for resettlement purposes? This would not only save the areas opened up for resettlement from deforestation but also help maintain the fertility of the land.

Sacred pools played a very important role in the conservation of wetlands while shrines and sacred grooves were responsible for forest conservation. Most shrines were used as places of worship and they remained in their natural state for long periods most of them were converted into conservation forests e.g. Matopos Game Reserve and Mavhuradona Game Reserve (Murombedzi 2003). Few African countries are as well-endowed with both natural and cultural sites of international significance as Zimbabwe (Hyland & Ikumenne, 2005). It is home to the Matobo Hills, which are of spiritual significance to the Ndebele and Shona people. Important traditional ceremonies are conducted at shrines in these hills; for example, during severe drought rainmaking ceremonies are often performed at the Njelele shrine. It is believed that the ancestral spirits of the people live among the hills (Manwa, 2007). In most African communities, the ancestral spirits are believed to be living in the forests and special trees, caves, and ruined homes and water bodies (Wilson, 1989). Such landscape elements are therefore normally treated with veneration to ensure limited human access to them lest the spirits be offended and driven away “homeless”. In this regard, it is taboo to cut down trees found in a sacred place without the sanction of the local chief priest.

4.8 Communities with Hunting History

However, it is not always that religious and cultural practices have positive influences on natural resource management. Communities with a long history of hunting pose great challenges to the sustainable use and management of wildlife. The Pfungwe people were forcibly removed from the Mapfungautsi area to give way for a forest reserve that also serves as a wildlife sanctuary (Mamimine, 1998). Traditionally, these people heavily depended on hunting. Up until they were removed from the area, they were primarily a community of hunters. Their removal from the area declared a forest reserve denied them access to game. Since the Pfungwe people were resettled just outside the Forest Reserve, conflict arose between them and the Forestry Commission’s Forest Protection Unit (FPU). The Pfungwe people continued to hunt in the forest illegally. Attempts to bring the culprits to book have always been problematic because local people were not cooperating in giving information on the

poachers. A serious difference of perception existed between the Pfungwe people in general and the FPU. While the FPU thought they were pursuing poachers, the generality of the Pfungwe people regarded the pursued people as hunters (Mamimine, 1998).

The solution to the above problem lies in accepting that one cannot change the lifestyle of a people overnight by a mere stroke of the legal pen. To avoid a conflict of interests between the state's aim of conservation for conservation only and the local people's survival and development imperatives, it is necessary to plan for conservation with and for benefits. In other words, solutions should be sought to accommodate the Pfungwe people's hunting tradition. A case in point is the Mahenye community where joint wildlife management between the community and a private partner allows for traditional hunting to persist using less sophisticated weapons such as the bow and arrow (Mamimine, 1998). The desire for meat which motivated some local people to poach game has also been catered for by setting up community game butcheries where meat is sold at very affordable prices. The establishment of a community butchery and facilitating of controlled hunting for some local people has been instrumental in eliminating "the wildlife as moving butchery" mentality among the local people. It has also succeeded in replacing conflict with cooperation in wildlife management between outsiders and the local people. Thus, such a strategy can be used to deal with communities with hunting history.

4.9 Ritual Significance of Round Huts and NRM

Among the Shona people, the round hut is the locus of ritual or ancestral veneration ceremonies in any family (Mamimine, 1998). In areas where trees for construction purposes have become scarce, many Shona people have little option but to put up buildings with bricks and timber purchased from timber suppliers (Ngara & Mangizvo, 2013). Despite the scarcity of poles for construction purposes, each homestead should find enough just to thatch a round hut which is a building perceived to be of ritual significance to the life of the family. It is believed that for any ritual communication with ancestral spirits to succeed, it has to be conducted in a round hut. The body of any deceased member of the family should lie overnight in the round hut or kitchen before burial (Ngara & Mangizvo, 2013). This cultural practice has increased deforestation in many parts of the country where trees have become a scarce resource.

Although it is very difficult to re-orient a people from their ancestral way of doing things, the use of the round hut has fostered both deforestation and land degradation making it imperative to find alternate solutions. The rural housing program (though now defunct) once launched by the Zimbabwean government as well as the rural electrification program modernized parts of the countryside, leading to the abandonment of the round huts. Brick

and asbestos roofing now characterize areas reached by the government's initiative. Such initiatives are necessary to bring modernity to the countryside where the round huts are still in fashion and reduce pressure on the environment.

4.10 Ornamental Dressing and NRM

Among the Shona people, the skin of a leopard provides the most highly rated ornamental dressing either as a cover for the full body or just the head (Mamimine, 1998). The most revered chiefs dress in leopard skin whenever they are presiding in their local courts. Traditional healers also express their reputation by dressing in leopard skin when practicing. The value attached to the leopard skin threatens the life of leopards significantly. The most daring poachers target it because the rewards are high. In some instances, a person may be given two beasts as an appreciation for bringing a traditional healer or chief a leopard skin (Mamimine, 1998). The practice of dressing in leopard skin as a status symbol for both chiefs and healers should be abolished to save the leopard. The hut of such threatened wildlife species should be outlawed by the state and stiff penalties meted to offenders. Thus, this calls for collaborative efforts between NRM and state policy.

5. Discussion

As mentioned earlier on, communities also interact with natural resources in their locales in accordance with established patterns of behavioral norms. Culture has rules and regulations that govern the exploitation of natural resources (Tsikai, 2006). The Indigenous people possess (ed) a very vital knowledge base that is characterized by deep virtues of moral being, ethically based, spiritually intuitive, and above all holistic (Dore, 2001; Chigwenya & Manatsa, 2007). They developed cultural beliefs and taboos that formed the foundation for natural resource management. Natural resource conservation strategies were interwound in these cultural beliefs. Thus how people think, feel, and behave is questioned and possibly condemned against the background of those absolute behavioral norms. This does not suggest in any way that nobody in the community violates the norms and values of interacting with certain natural resources. Of critical importance, is to note that these norms and values, no matter how irrational they are perceived to be by outsiders have their internal logic. By *internal logic*, we are referring to a system of rationalization or thought patterns that guide individual and group behavior *vis-à-vis* interaction with a particular resource. Cases, where culture promotes NRM, can be illustrated by examples from the Shona people of Zimbabwe's totems, the role of traditional institutions of governance, traditional medicine, traditional burial system, and agri-forestry. On the other hand, cultural practices that inhibit effective NRM can also be

illustrated by Shona societies with a hunting history, round huts, and ornamental dressing which leads to fauna and flora decimation.

However, over the years cultural norms of resource management have largely been pushed to the periphery. When Zimbabwe attained independence in 1980, the post-independence government shifted authority over natural resource management to democratically elected local institutions of governance, that is Village Development Committees (VIDCOs) and Ward Development Committees (WADCOs). For the first time, people had leaders whose authority was not steeped in the myth of “representatives of the spirits of the land” but in the power of the electorate. This new dispensation resulted in people appropriating natural resources in a manner reminiscent of Hardin's (1967) tragedy of the commons. Resource began to be perceived as “open access”. This was principally because the elected leaders were afraid of punishing offenders as it would make them unpopular with the electorate, resulting in a loss of votes in the next round of elections. Traditional leaders with a “hangover” of authority who tried to enforce the laws as they did in the colonial days risked being beaten by the people. Nobody recognized their authority anymore. Mamimine (1998: 1999) observed this scenario in the Chief Bepura area in Guruve, Nyamayaro Village in Murehwa, and Romwe Catchment Area (Chivi) in Zimbabwe. Seemingly, a system of “nested” institutions (see Ostrom, 1967's Design Principles) in Natural Resource Management (NRM) at the grassroots level would pay better dividends as compared to rendering traditional institutions of governance completely dysfunctional.

However, despite the gradual phasing of cultural practice of natural resource management, they continue to save a role, especially in rural communities where culture remains strong. Beliefs and taboos formed codes of behavior that ensured sustainable natural resource utilization. In this setup, the ancestors and founding spirits were the custodians of natural resources and wildlife and their utilization was supposed to be done in accordance with the agreed codes of behavior that vary from society to society. Societies, social conformity, and religious sanctions fostered compliance with natural resource management regimes. Cultural practices such as totemism remains strong even today. Under the totem system, most families or individuals are identified with a particular animal or fish. Some of the animals people identify with in their totemic system, *inter alia*, are lions, elephants, eland, sheep, monkeys, and others. Although meat formed the greater part of indigenous people's diet, the harvesting of wildlife did not degrade the environment (Murombedzi, 1990; Chemhuru & Masaka, 2010; Ngara & Mangizvo, 2013). Not all animals were hunted, some animals were considered to hold special societal values and hence were not hunted for example one was not allowed to hunt animals of his/her totem and there was a certain group of animals such as baboons and monkeys, which were not allowed to be hunted. Nobody ate the flesh of an animal

he identifies with as a totem. Other cultural practices included use of caves and hilly areas as burial grounds to conserve arable land, use of cultural medicine and the practice sustainable harvesting of the medicine among a host of other cultural practices. Such an observation calls for a need to marry modern forms of natural resource conservation with traditional methods for an effective natural resource management framework.

5.1 Practical Implication

The 21st century has witnessed an unprecedented decline in biological diversity – species, ecosystems, and genetic diversity (Fonjong, 2008; Anthwala et al., 2010). The explanation for the rapid decline has been attributed to the fact that traditional beliefs are rapidly being eroded worldwide. The diminishing relevance of these informal, self-imposed restrictions on natural resource use is threatening species and habitats that were once afforded protection by traditional customs and practices (see Anoliefo et al., 2003; Lingard et al., 2003; Bhagwat & Rutte, 2006). The disregard for these traditional checks and balances especially among modern communities has adversely affected their enforcement. The abandonment of traditional cultural practices is doing harm that goes beyond the abrogation of traditional cultural practices to a serious threat to natural environmental structures (Anoliefo et al., 2003). The erosion of tradition is characteristic of developing countries, where there is increased exploitation of biodiversity, and this is threatening approximately one-third of species worldwide (Opoku, 2006; Ngara & Mangizvo, 2013).

The over-exploitation of natural resources in most African countries has led to serious environmental degradation in the form of deforestation, desertification, soil erosion, and air and water pollution. Instead of using Indigenous practices to deal with environmental catastrophes, African governments, and policymakers prefer to employ strategies and techniques which work in developed countries (Katerere, 2001). Unfortunately, these are not suitable for conditions in Africa. Government leaders and policymakers should make use of Africa's wealth of experiential knowledge, norms, taboos, and a range of cultural practices that have sustained local ecosystems on the continent for centuries (W.B., 1991).

The study recommends that the African government policymakers should promote the inclusion of the Shona religious beliefs and cultural practices in the conservation and preservation of natural resources since the information tends to be peculiar to this particular ethnic group. In a nutshell, indigenous knowledge systems should help save the interests of the locals and ultimately their land. It is advocated that African government policymakers should not just adopt policies that worked positively in developed countries and implement them to conserve and preserve natural resources. The indigenous people have their taboos that work well for them and

they need to be promoted for the benefit of future generations. The study recommends that there is a great need to find out the role of African Indigenous symbols in various ethnic groups in their particular environment. These symbols need to be brought into public knowledge. This can be achieved by introducing programs that focus on teaching indigenous knowledge systems at institutions of high learning.

5.2 Theoretical Contributions

Enough attention has not been given to the existing literature on the contribution of cultural practices to sustainable cultural heritage management. Thus, the research findings may make substantial contributions to the academic society by illuminating the centrality of cultural practices to sustainable cultural heritage management. The study's results may be utilized to gain insights into how cultural practices contribute to developing sustainable cultural heritage in Zimbabwe. This study derived illumination from various inter-disciplinary theories such as Social Exchange Theory, Theory of Unintended Consequences, and Expectancy Theory. The above theories gave us various lenses that support us in interpreting and comprehending the concept under investigation as the researcher attempts to assign meaning to reality. Even though each theory has illuminating rationality in the planned research, most of the theories mentioned above are limited in scope in terms of enlightening all the themes under study. After a close review of all the 'theoretical jackets' above, the Expectancy Theory arose as predominant, with characteristics that provide it illuminating rationality to all the key themes covered by this research. Their importance is all-encompassing as they aid in elucidating why people are motivated to engage in certain activities. However, the theory fell short in terms of illuminating why some go against cultural norms such as totemism. In recent times unsustainable practices such as poaching, have gained momentum, however, the above theories have failed to provide enlightenment on this development. As a result, there is a need for further studies to develop theory.

However, the overarching theory (Theory of Expectancy) offered explanatory validity in terms of understanding the cultural practices of natural resource management phenomenon. Critically the theory helped us to understand the reason behind the cultural practices that led to sustainable cultural heritage management such as use of caves as burial grounds, totemism, etc. However, the theory fails to illuminate the whole phenomenon.

Seemingly, reality from the findings of the study points to the futility of the Theory of Expectancy assuming that people usually follow cultural practices despite changes in both the natural and economic environment. The global dynamic changes have affected whole facets of life, leading to changes in both the normal and cultural practices. There is now a need to have theory that sheds light on the changes as well as the impacts on cultural practices and

the implications to natural resource management. Some cultural practices may also have led to unintended consequences affecting natural resource management. Although the Theory of Expectancy was identified as a close fit in illuminating the sector, the study requires an overarching theory, illuminating both the behavior of organizations and individuals and that of responsible authorities in compliance with natural resource management.

5.3 Limitations and Future Research Recommendations

Some cultural communities, depending on cultural norms (open and closed cultures) and in-house policies within organizations, may not be willing to open up on some of the challenges they face in trying to facilitate natural resource management. Therefore, institutional policies, cultural and traditional norms and values need to be observed within the selected communities and organizations in future studies. There are scarce studies conducted to date that focus on cultural practices and natural resource management in the Zimbabwean context. Studies from other economic environments were heavily relied upon. There is need for broadening studies in this research area.

The fact that the aspects touched are not exhaustive, at least in the case of Zimbabwe, implies that Natural Resource Managers still have a very broad field in which to select cultural practices that need to be reinforced in the pursuit of sound and sustainable NRM.

6. Conclusions

Evidence from literature suggests that Shona's religious beliefs and cultural practices have been instrumental in providing natural resource management. Such evidence dismisses the reductionist tendencies of the modern natural resource management perspective which prevents one from understanding the dynamics of traditional natural resource management. Thus, one may conclude that the traditional natural resource management practices based on the religious beliefs and cultural practices of tribes can play an equally important role in dealing with the challenges of natural resource management. Contemporary natural resource management practices perspective only tells us half the story of the dynamics of natural resource management. Its main drawback is that one misses out on the critical tentacles in the provision of interventions in natural resource management. Thus, this paper calls for a holistic approach to the management of natural resources in developing countries, particularly in Africa, which in essence recognizes the important role that religious beliefs and cultural practices can play in natural resource management.

The above discussion offers openly a few examples of ways in which the culture of a particular people may impact positively or negatively in NRM. The broad field also offers challenges to Natural Resource Managers to identify cultural practices that need to be discouraged for the effective implementation of NRM. The bottom line is that this paper was principally meant to provoke NR Managers to become aware and to start thinking about the cultural dimension of Natural Resource Management.

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